

We claim:

1. A vaginal or rectal applicator comprising
 - (a) an applicator barrel, wherein the applicator barrel comprises a medication chamber at the end of the applicator, wherein the medication chamber is capable of containing 1 mL or less of a pharmaceutical composition;
 - (b) a plunger, wherein the plunger is insertable in telescoping relation to the applicator barrel;
 - (c) a plunger tip, wherein the plunger tip is at the end of the plunger; and
 - (d) an applicator cap, wherein the applicator cap is removable from the applicator barrel.
2. The vaginal or rectal applicator of claim 1, wherein the applicator further comprises a flange.
3. The vaginal or rectal applicator of claim 1, wherein the applicator cap has a diameter that is effective at preventing insertion of the vaginal applicator into a vagina when the applicator cap is attached to the applicator barrel
4. The vaginal or rectal applicator of claim 1, wherein the applicator cap forms an air-tight seal with the applicator barrel.
5. The vaginal or rectal applicator of claim 1, wherein the plunger tip forms an air-tight seal with the applicator barrel.
6. A method of transvaginal or transrectal drug delivery comprising
 - (1) placing 1 mL or less of a pharmaceutical formulation in a vaginal or rectal applicator, wherein the vaginal applicator comprises
 - (a) an applicator barrel, wherein the applicator barrel comprises a medication chamber at the end of the applicator, wherein the medication chamber is capable of containing 1 mL or less of a pharmaceutical composition;
 - (b) a plunger, wherein the plunger is insertable in telescoping relation to the applicator barrel; and
 - (c) a plunger tip, wherein the plunger tip is at the end of the plunger;
 - (2) placing an applicator cap on the applicator barrel;

- (3) removing the applicator cap from the applicator barrel; and
- (4) inserting the applicator barrel into a patient's vagina or rectum.

7. The method of claim 6, wherein the pharmaceutical formulation is in a form selected from the group consisting of a powder, gel, cream, lotion, suppository, ovule, tablet, and capsule.

8. The method of claim 6, further comprising depressing the plunger to administer the pharmaceutical formulation to the region of the patient's upper vaginal vault or rectum.

9. The method of claim 6, wherein the pharmaceutical formulation is in an amount effective to treat disorders and diseases of the of the female urogenital system, cervix, uterus, ovaries, fallopian tubes, peritoneal cavity, and lower abdominal cavity.